

SHORT COMMUNICATION

Taxonomic notes on the genus *Microfilistata* (Araneae: Filistatidae), with a description of a new species from Turkmenistan

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Abstract. *Microfilistata ovchinnikovi* new species (Araneae: Filistatidae), the second member of this formerly monotypic Central Asian genus, is described from Kyzyl-Dzhar Ravine, Southern Turkmenistan. The genus is redescribed and referred to the Filistatidae insertae sedis.

Keywords: spider, Filistatidae, taxonomy, Central Asia

The genus *Microfilistata* was based on a single incomplete male specimen from Uzbekistan (Zonstein 1990). According to Gray (1995), palpal characters of the genus show some resemblance to those of the filistatine genera but relationships of *Microfilistata* remain unresolved. The occurrence of the second congener in Turkmenistan, represented also by females, seems to be helpful to provide the genus with a complete description. The type series, including the holotype of this new species, is kept in Department of Zoology, Tel-Aviv University, Israel (TAUI). Measurements are expressed in millimeters, except eye diameters/interdistances shown as the ratio of microscope scale units at 100x magnification. Abbreviations: AME, ALE, PLE, PME = anterior median and lateral, posterior lateral and median eyes; ALS, PMS, PLS = anterior lateral, posterior median and lateral spinnerets, respectively.

Microfilistata Zonstein 1990

Microfilistata Zonstein 1990:51; Gray 1995:80.

Type species.—*Microfilistata tyshchenkoi* Zonstein 1990 by original designation and monotypy.

Diagnosis.—Males belonging to *Microfilistata* can be distinguished from other male filistatids by their enclosed palp. Conspecific females are characterized by unusually (for female filistatids) long and slender palps and legs covered with a reduced number of long setae.

Redescription.—Small pale-colored filistatids with body length of 1.6–1.7 mm in males and 2.5–2.7 mm in females; legs and abdomen without pattern. Carapace domed, broad-oval, wide-rounded anteriorly. Thoracic fovea absent. Clypeus short and steeply inclined with few stout erect bristles. Eye tubercle low. ALE > PLE ≈ PME > AME. Chelicerae small, downward-directed; cheliceral furrow and fang very short; prolateral lamina small but distinct. Sternum subcircular, sigillae not evident (Figs. 3, 6). Labium slightly wider than long. Maxillae trapezoidal. Pedipalps and legs long and slender, both in males and females. Male palpal tibia long, cylindrical. Cymbium long, with apical extension entirely covering the tegulum. Embolus sharpened, more or less curved. Leg formula: 1423. Sexual dimorphism in leg length weakly developed. Legs covered with rather sparse, long setae. All femora with one weak dorsoproximal spine. Leg tarsi ascopulate, long and entire, without pseudosegmentation. Short calamistrum represented by a few curved and flattened setae on raised keel. Paired tarsal claws narrow and curved, with a single row of few weak teeth. Unpaired claw weakly curved, edentate. Female spermathecae divided. Spinneret group small and located closer to abdomen tip. Cribellum small, bipartite, trapezoidal. ALS and PLS with thickened setae, PMS with one probably paracribelar gland spigot (PS).

Notes.—Like the filistatine genera, *Microfilistata* possesses a short and narrow calamistrum confined to the metatarsal crest in females

(shown as a filistatine synapomorphy by Ramírez & Grismado, 1997) and a long cylindrical cymbium with a highly coiled ejaculatory duct in males. On the other hand, the genus resembles in some aspects the members of the Prithinae: in both cases the thoracic fovea appears to be undeveloped, only one PS is present (indicated by Ramírez & Grimaldo, op. cit., as a prittine synapomorphy), and male tarsi are entire, not pseudosegmented, cracked or bent; although at least some of the mentioned characters in *Microfilistata* could be explained rather by a miniaturize size of the congeners. Hence, the characters of *Microfilistata* are found to be doubtful, and the genus is referred to the Filistatidae incertae sedis until a further knowledge on Asian filistatids is attained.

Microfilistata ovchinnikovi new species
(Figs. 1–8)

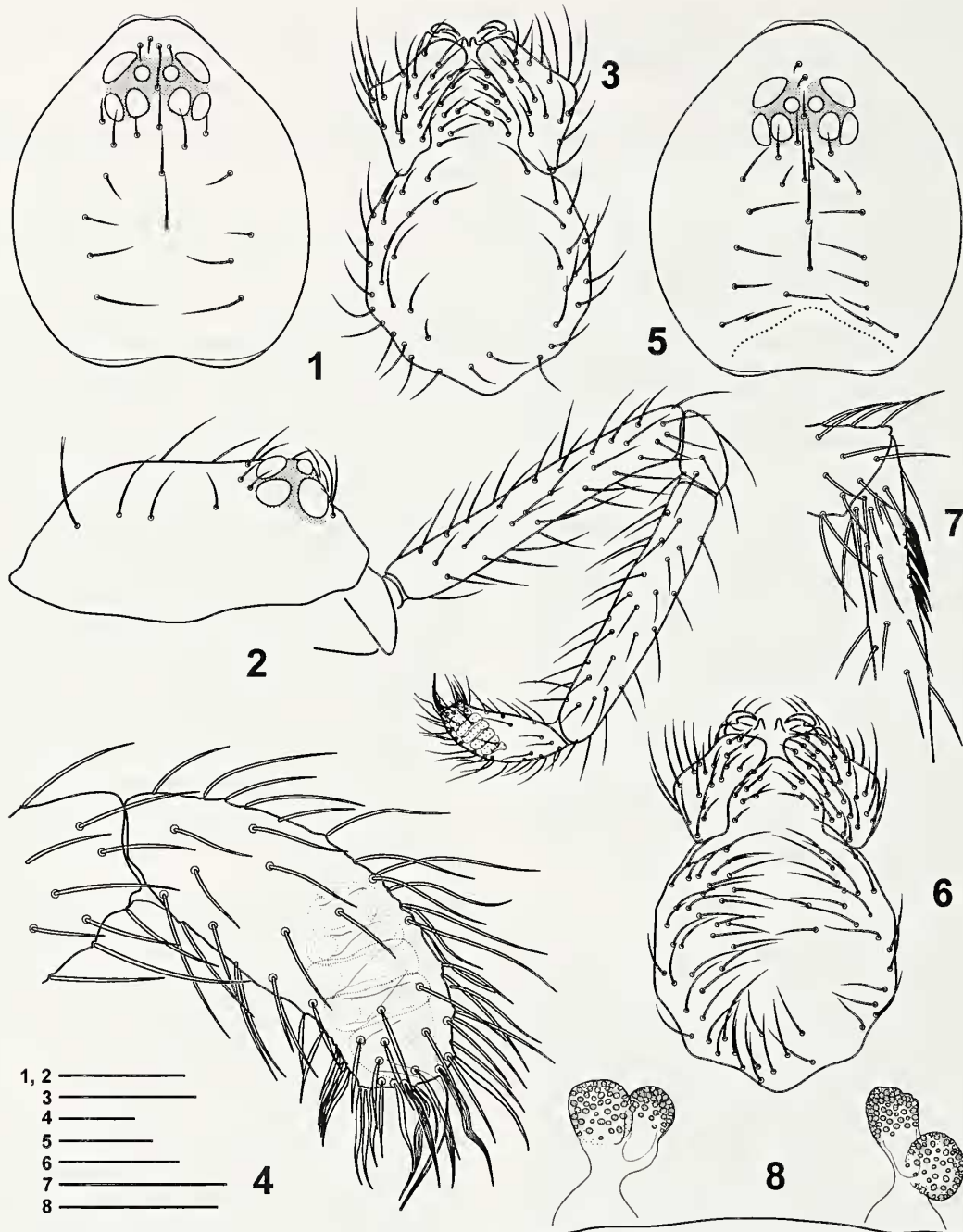
Types.—Male holotype and 3 female paratypes from Kyzyl-Dzhar Ravine, 580–620 m above sea level, SE border of Badkhyz Plateau, Turkmenistan (35°48'N, 61°53'E), 11 April 1993, S.V. Ovchinnikov (TAUI).

Etymology.—The specific name is a patronym in honor of the late Central Asian arachnologist Mr. Sergei Ovchinnikov, the collector of the species and a good friend of mine.

Diagnosis.—Differs from *M. tyshchenkoi* by a different eye ratio (AME:ALE 1:2 vs. 1:3 in the latter species) and by having a more thin, tapering and spirally twisted embolus. Any structures resembling palpal conductor absent.

Description.—Male (holotype): Total length 1.61; whole spider pale yellowish-brown save for the dark brown eye tubercle and prolateral lamina, and brownish setae, chelicerae and tarsal claws; abdomen light yellowish-gray. Carapace (Fig. 1): 0.68 long, 0.59 wide. Eye tubercle (Fig. 2) low. Ratio of AME, ALE, PLE, PME: 5, 10, 7, 6. Interdistances: AME–AME 2, ALE–AME 1, ALE–PLE 1, PLE–PME 1, PME–PME 3. Labium and sternum as shown on Fig. 3. Measurements (length): palp: femur 0.66, patella 0.16, tibia 0.57, cymbium 0.28; legs 1–4: femora: 1.22, 0.91, 0.86, 1.04; patellae: 0.25, 0.23, 0.22, 0.23; tibiae: 1.24, 0.77, 0.62, 1.17; metatarsi: 1.12, 0.83, 0.78, 1.07; tarsi: 0.70, 0.52, 0.45, 0.53. Palps lack spines. Leg spination: femora: I d1–0–0, p 0–0–1, r 0–0–1, II–IV d1–0–0; tibiae: I–II d1–0–0, p 0–0–1, v 0–1–0, r 0–0–1; III–IV d1–0–0, p 0–0–1, r 0–0–1; metatarsi: I p 0–1–1, r 0–1–1; other segments lack spines. Palpi as shown on Figs. 3, 4. Paired tarsal claws with 3–4 weak teeth, unpaired claw bare.

Female (paratype): as in male, except as noted. Total length 2.70. Carapace (Fig. 5): 0.94 long, 0.84 wide. Ratio of AME, ALE, PLE, PME: 5.5, 10, 9, 8. Interdistances: AME–AME 2, ALE–AME 2, ALE–PLE 1, PLE–PME 1, PME–PME 3. Measurements (length): palp: femur 0.65, patella 0.22, tibia 0.48, cymbium 0.53; legs 1–4: femora: 1.17, 0.95, 0.91, 1.02; patellae: 0.33, 0.32, 0.23, 0.33; tibiae: 1.23, 0.86, 0.79, 1.04;



Figures 1–8.—*Microfilistata ovchinnikovi* sp. n., male (1–4) and female (5–8). 1, 5. Dorsal view of carapace; 2. Lateral view of carapace, chelicera and palp; 3, 6. Ventral view of chelicerae, labium, sternum and maxillae; 4. Lateral view of male palpus; 7. Lateral view of calamistrum; 8. Ventral view of spermathecae. Scale for 1–3, 5–7 = 0.25 mm; for 4 and 8 = 0.1 mm.

metatarsi: 1.10, 0.81, 0.76, 1.00; tarsi: 0.74, 0.53, 0.48, 0.51. Femora I–IV with one basodorsal spine. Labium and sternum, calamistrum and spermathecae are as shown in Figs. 6, 7, and 8, respectively.

Distribution and habitat.—Known only from the type locality. Spiders inhabit cavities and cracks in rock cliffs and escarpments of the ravine.

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LITERATURE CITED

- Gray, M.R. 1995. Morphology and relationships within the spider family Filistatidae (Araneae: Araneomorphae). Records of the Western Australian Museum, Supplement 52:79–89.
- Ramírez, M.G. & C.J. Grismado. 1997. A review of the spider family Filistatidae in Argentina (Arachnida, Araneae), with a cladistic re-analysis of filistatid genera. Entomologica Scandinavica 28:319–349.
- Zonstein, S.L. 1990. A synopsis of species of the spider family Filistatidae (Aranei) of the USSR with description of a new genus and a new species from Western Tien-Shan. Zoologicheskii Zhurnal 69 (10):50–53 [in Russian, English summary].

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